Honeywell

ACUIX™Series

Rugged Housing and Dome

Installation Guide

Document 800-02026 – Rev A – 08/08

Revisions

Issue	Date	Revisions
A	08/08	New document

Explanation of Symbols

WARNING! The exclamation point in a red octagon is a WARNING. Failure to take or avoid a specific action could result in **physical harm to a person or irreparable damage to equipment**.

Caution The lightning flash with arrowhead symbol within an equilateral triangle alerts the user to the presence of uninsulated "dangerous voltage" within the enclosure of the product that **may be of sufficient magnitude to constitute a risk of electric shock to the person**.

Caution The exclamation point in a yellow equilateral triangle is a Caution. Failure to take or avoid a specified action could result in **loss of data or damage to equipment** and may contain important operating and maintenance servicing information.

FCC Compliance Statement

Information to the User: This equipment has been tested and found to comply with the limits for a Class B digital device. Pursuant to Part 15 of the FCC Rules, these limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference. For example, try orienting or relocating the receiving antenna, increasing the separation between the equipment and receiver, or connecting the equipment to an outlet on a different circuit.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Users of the product are responsible for checking and complying with all federal, state and local laws and statutes concerning the monitoring and recording of video and audio signals. Honeywell Video Systems shall not be held responsible for the use of this product in violation of current laws and statutes.

Canadian Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Manufacturer's Declaration of Conformance

North America
The equipment supplied with this guide conforms to UL60065, CAN/CSA C22.2 No. 60065:03.

Europe
The manufacturer declares that the equipment supplied with this guide is compliant with the essential protection requirements of the EMC directive 2004/108/EC and the Low Voltage Directive LVD 2006/95/EC, conforming to the requirements of standards EN 55022 for emissions, EN 50130-4 for immunity, and EN 60065 for Electrical Equipment safety.

Australia
This Class B digital apparatus complies with Australian Communications Authority (ACA) C-Tick standards, supplier number N219.

Warnings and Cautions

Read the following cautions and warnings prior to installation and use of this product.

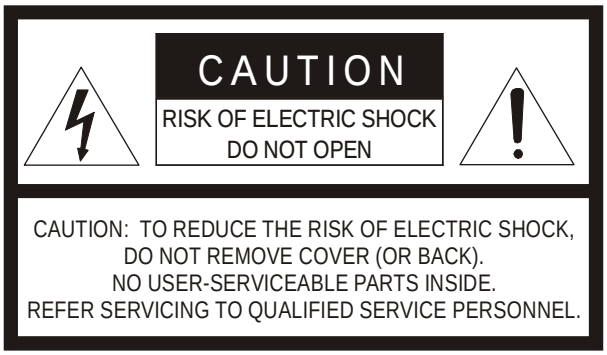
All installations and servicing must be performed by qualified technical personnel and must be in accordance with all national and local mechanical and electric codes.

To prevent injury, this apparatus must be securely attached to the wall/ceiling in accordance with the installation instructions.

To prevent damage to the interface board, follow standard industry precautions for electrostatic discharge sensitive devices.

Consider using a UPS source to ensure satisfactory performance.

Using replacement parts or accessories other than the original manufacturers may invalidate the warranty.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Important Safety Instructions

BEFORE OPERATING OR INSTALLING THE UNIT, READ AND FOLLOW ALL INSTRUCTIONS.
AFTER INSTALLATION, retain the safety and operating instructions for future reference

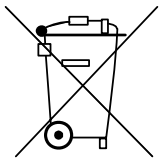
1. **HEED WARNINGS** - Adhere to all warnings on the unit and in the operating instructions.
2. **INSTALLATION**
   - Install in accordance with the manufacturer's instructions.
   - Installation and servicing should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.
   - Do not install the unit in an extremely hot or humid location, or in a place subject to dust or mechanical vibration. The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.
   - Any wall or ceiling mounting of the product should follow the manufacturer's instructions and use a mounting kit approved or recommended by the manufacturer.
3. **POWER SOURCES** - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your facility, consult your product dealer or local power company.
4. **HEAT** - Situate away from items that produce heat or are heat sources such as radiators, heat registers, stoves, or other products (including amplifiers).

5. **MOUNTING SYSTEM -** Use only with a mounting system recommended by the manufacturer, or sold with the product.
6. **ATTACHMENTS** - Do not use attachments not recommended by the product manufacturer as they may result in the risk of fire, electric shock, or injury to persons.
7. **ACCESSORIES** - Only use accessories specified by the manufacturer.
8. **CLEANING** - Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
9. **SERVICING** - Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
10. **REPLACEMENT PARTS** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

Warranty and Service

Subject to the terms and conditions listed on the Product Warranty Card, during the warranty period Honeywell will repair or replace, at its sole option, free of charge, any defective products returned prepaid. **In the U.S.A. and Canada, call 1.800.796.2288.**

In the event you have a problem with any Honeywell Video product, please call Customer Service for assistance or to request a Return Merchandise Authorization (RMA) number. Be sure to have the model and serial number, and the nature of the problem available for the technical service representative. Prior authorization must be obtained for all returns, exchanges, or credits. **Items shipped to Honeywell without a clearly identified Return Merchandise Authorization (RMA) number may be refused.**



WEEE (Waste Electrical and Electronic Equipment). Correct disposal of this product (applicable in the European Union and other European countries with separate collection systems). This product should be disposed of, at the end of its useful life, as per applicable local laws, regulations, and procedures

Contents

About Using This Guide 9
Installation Overview 10
Related Documents 11
Wiring and Power Cautions and Requirements 11
Wiring and Power Cautions 11
Recommended Wiring 12
Power Requirements 12
Step 1: Set the Switches on the Housing Interface Board 13
About RS485 Termination and Wiring on Switch SW1 14
Setting the RS485 Control Data Termination on Switch SW1 16
About Video Selection Switch Options on Switch SW2 16
Selecting Video Over Coaxial Cable or Unshielded Twisted Pair (UTP) 17
Step 2: Set Switches on the Scan Assembly Circuit Board 17
Step 3: Mount the Rugged Housing Bracket 19
Step 4: Mount the Housing to the Ceiling or Wall 21
Step 5: Connect the Field and Terminal Block Wiring 21
Step 6: Install the Scan Assembly into the Housing 25
Step 7: Install the Lower Dome onto the Housing 26

Figures and Tables

Figures

Figure 1-1 ACUIX Housing Interface Board Layout . . . 14
Figure 1-2 RS485 Daisy-Chain Wiring (up to 32 domes): Control at One End. . . . 15
Figure 1-3 RS485 Daisy-Chain Wiring (up to 32 domes): Control in the Middle . . . 15
Figure 1-4 Scan Assembly Circuit Board - DIP Switch Location . . . 18
Figure 1-5 Rugged Housing Bracket Hole Dimensions . . . 20
Figure 1-6 Rugged Housing Layout . . . 22
Figure 1-7 J4 Terminal Block Alarm Connection . . . 23
Figure 1-8 Rugged Housing Cable Access Hole . . . 24
Figure 1-9 Insert the Scan Assembly into the Housing. . . . 25
Figure 1-10 Rugged Housing - Lower Dome . . . 26

Tables

Table 1-1 Related Documents and External Links . . . 11
Table 1-2 Recommended Video, Data, Power, Alarm and UTP Cabling . . . 12
Table 1-3 Wire Gauge Required for Maximum Distance to Dome . . . 13
Table 1-4 Power Supplies . . . 13
Table 1-5 Recommended Lift Settings for Cable Lengths . . . 17
Table 1-6 Recommended Gain Settings for Cable Lengths . . . 17
Table 1-7 DIP Switch SW5 ACUIX Protocol Settings . . . 18
Table 1-8 DIP Switch SW6 ACUIX Baud Rate Settings . . . 18
Table 1-9 DIP Switch SW6 ACUIX Parity Settings. . . . 19
Table 1-10 ACUIX Dome Addresses . . . 19
Table 1-11 Terminal Strip Pins and Functions (J1, J4, J6 and J7) . . . 24

ACUIX Rugged Housing and Dome

About Using This Guide

This guide provides instructions to install the ACUIX rugged dome.

ACUIX Terminology

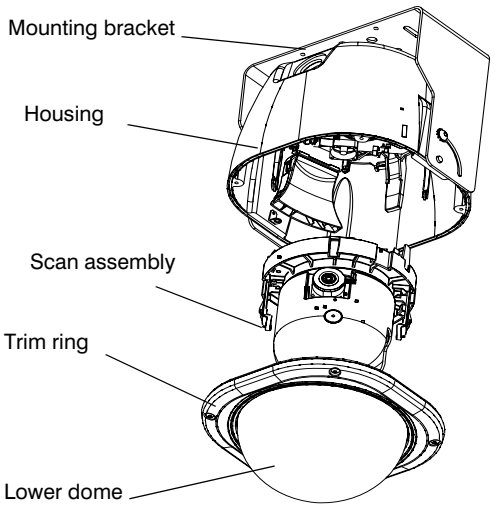
Dome: the complete installed product including the housing, mounting bracket, lower dome, and the scan assembly.

Scan Assembly: the combination of firmware, electrical and mechanical components including the camera. The scan assembly is installed into the housing and enclosed by a lower dome. The scan assembly is a component of a dome.

- **Camera:** the particular model camera purchased. The camera is a component of the scan assembly.

Housing: the in-ceiling, indoor or outdoor pendant and surface mount upper enclosure. Housing is a hardware component of the dome.

The ACUIX Dome is comprised of:



- **Mount**: the hardware used to mount the housing to the applicable surface (for example, a ceiling or wall). The mount is a hardware component used with a specific type of housing.

Lower Dome: the clear or colored enclosure that covers the scan assembly and attaches to the housing. With the rugged dome, it also includes the trim ring. The lower dome is a hardware component of the dome.

Rugged Housing and Dome Model Numbers

For other model numbers and information on the Honeywell Video web site, see *Related Documents* on page *11*.

Housing

- HDH00RA00: Rugged, white, analog

Lower Dome

- HDB00R0CW: Rugged, clear lower dome, white trim ring
- HDB00R0SW: Rugged, smoked lower dome, white trim ring

Installation Overview

For all outdoor installations, joints, bolts, and screws in the mount must be properly sealed to prevent moisture from entering the housing.

A complete ACUIX system installation is a multi-step process and depends on individual hardware configurations. Some of the information to complete the installation may be in the manual associated with the hardware being installed. For related documentation and the link to the Honeywell Video web site, see *Related Documents* on page *11*.

A typical installation has the following steps. The order may be slightly different for each type of installation.

1. Set the RS485 termination and video selection switches on the housing interface board, *page 13*. Also refer to both the *ACUIX Indoor and Outdoor Housings Installation Manual* and *ACUIX High Speed Dome User Guide* for more information.
2. Set the DIP switches for the protocol and address on the scan assembly circuit board, *page 17*. Also refer to both the *ACUIX Indoor and Outdoor Housings Installation Manual* and *ACUIX High Speed Dome User Guide* for more information.
3. Mount the bracket to the ceiling, wall or other surface, *page 19*.
4. Mount the housing, *page 21*.
5. Connect the field and terminal block wiring, *page 21*.
6. Install the scan assembly into the premounted housing, *page 25*.
7. Install the lower dome to cover the scan assembly and enclose the housing, *page 26*.
8. Refer to the *ACUIX High Speed Dome User Guide* to complete these steps:
   - Test the installation and if required, troubleshoot.
   - If applicable, continue setting up and configuring privacy zones and preset tours.
   - If required or applicable, proceed to user configurations based on other hardware, for example, controllers and DVRs.

Related Documents

Table 1-1 Related Documents and External Links

Document title or link	Part number
ACUIX High Speed User Guide	*800-01023*
ACUIX Indoor and Outdoor Housings Installation Manual	*800-01760*
ACUIX Quick Installation Guide	*800-02219*
Honeywell Video online literature ***http://www.honeywellvideo.com/support/literature/index.html*** *Access PDF versions of data sheets, quick references, installation and user guides, specifications, product notices and other useful material*	

Wiring and Power Cautions and Requirements

Wiring and Power Cautions

- To make good wire contact and ensure the wire does not short to adjacent wires, fully insert the wire in the hole on the terminal strip.
- A good earth ground must be connected at J1, pin 2. Surge suppression is not provided if the unit is not connected to a good earth ground.
- Ensure there are no bare wires touching or faulty operation may occur.
- Ensure the cabling does not interfere with the rotation of the pan and tilt assembly.
- To maintain 24 VAC ± 10% at each dome, the proper wire size for the distance and the number of domes must be determined.
- For CE compliance, the power supply must be connected to a CE approved 240V UPS (uninterruptible power supply). See *Table 1-4* for a list of the power supplies which must be used to meet FCC and UL requirements.

Recommended Wiring

Note The terms *shielded* and *unshielded* are interchangable with *screened* and *unscreened*, respectively.

Note UTP is a general term for all cabling systems used for transmission of unshielded data and providing connectivity on a network. A UTP cable can contain multiple pairs of twisted cables. Commonly used for telephone cabling and 10BaseT and 100BaseT networks.

See *Table 1-2* for the recommended cable types for video, data, power, alarm, and UTP including the maximum cable distances for proper operation of the dome. Where applicable, use Category 5 (CAT5) cables or higher.

Table 1-2 Recommended Video, Data, Power, Alarm and UTP Cabling

Type	Recommended Cable	Maximum Distance
Video	Coaxial cable - RG59/U Connector - BNC crimp on for RG59/U	1000 feet (305 meters)
Data	One shielded twisted pair, RS485 cable, can also be Cat5 or better	4000 feet (1219 meters)
Power	18 AWG 2-conductor, vinyl jacket	See gauge chart for each unit
Alarm	Belden 8205	10,000 feet (348 meters)
Unshielded Twisted Pair (UTP) Video	Cat5 or better 1 twisted pair for data 1 twisted pair for video	1200 feet (366 meters)

Power Requirements

The outdoor ACUIX requires a 24 VAC power supply at 2.5A, measured at the dome.

Refer to *Table 1-3* and *Table 1-4* to determine the wire sizes and maximum distances for one power source for one ACUIX and the required power supplies for CE compliance.

Table 1-3 Wire Gauge Required for Maximum Distance to Dome

AWG	24 VAC Dome plus Heater & Blower (2.5A)
22	30 feet (9.1 meters)
20	47 feet (14.3 meters)
18	75 feet (22.9 meters)
16	120 feet (36.6 meters)
14	190 feet (58 meters)
12	302 feet (92 meters)

Table 1-4 Power Supplies

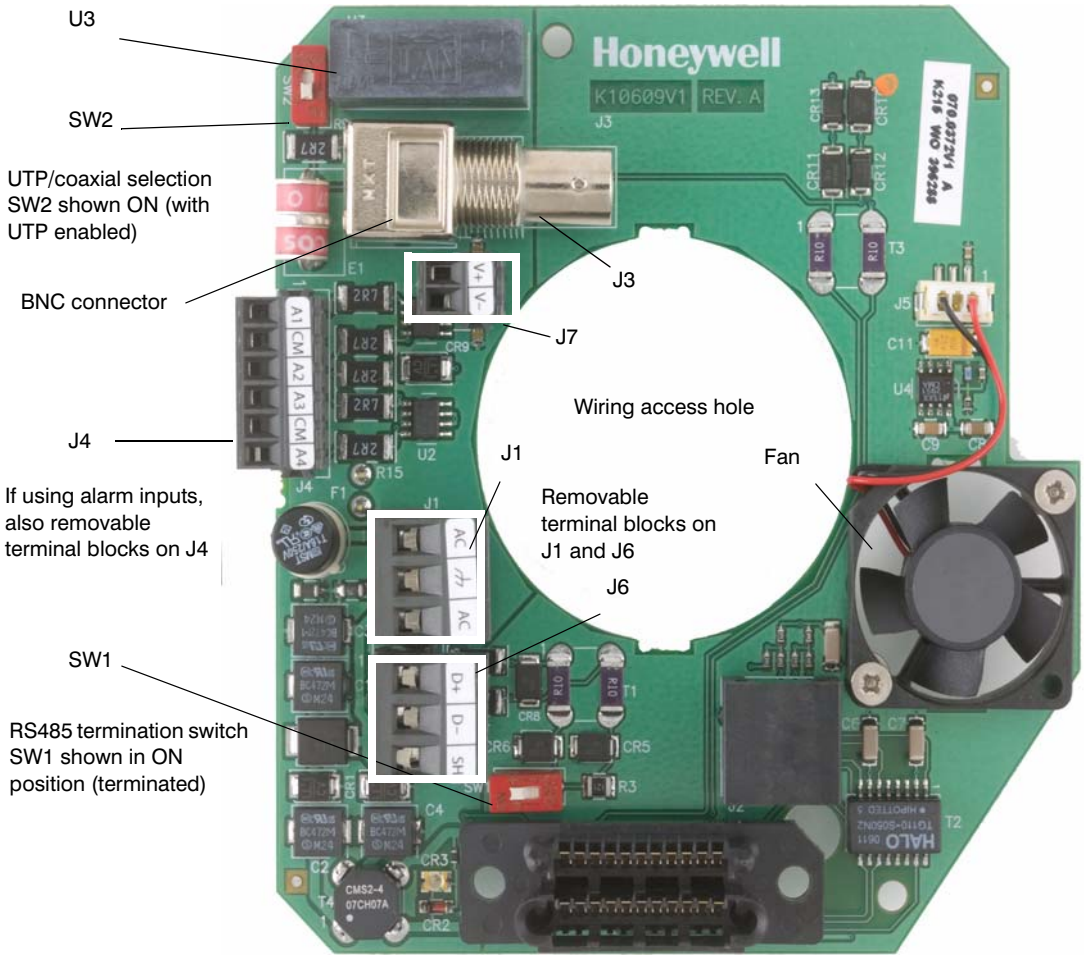
Model Number	Description
HPTV2416CB	16 output, 24 VAC, 8 A, SmartFused
HPTV2408CB	8 output, 24 VAC, 4 A, SmartFused
HPTV2404CB	4 output, 24 VAC, 4 A, SmartFused
HPTV2401WPZ	Single output, video, data and power protection, NEMA 4 enclosure
HPTV2401Z	Single output, video, data and power protection, indoor enclosure
HPTVWPPMK2	2" pole mounting kit for HPTV2401WPZ
HPTVWPPMK3	3" pole mounting kit for HPTV2401WPZ
HPTVWPPMK4	4" pole mounting kit for HPTV2401WPZ

Step 1: Set the Switches on the Housing Interface Board

To prevent damage to the interface board, follow standard industry precautions for electrostatic discharge sensitive devices.

Note Also refer to both the *ACUIX Indoor and Outdoor Housings Installation Manual* and *ACUIX High Speed Dome User Guide* for information.

Figure 1-1 ACUIX Housing Interface Board Layout



About RS485 Termination and Wiring on Switch SW1

For the RS485 daisy chain wiring, the data cable shield should be carried through all units by connecting the cable shields together. Connect the cable shield at the control unit.

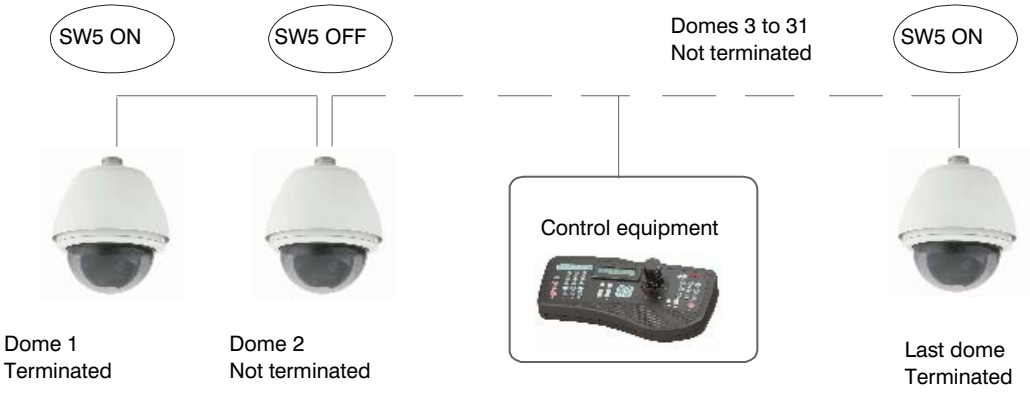
RS485 communication is terminated using switch SW1, located near terminal strip J1, pin 3 on the housing interface board. See *Figure 1-1*.

- One pair of shielded twisted pair RS485 wire or one pair of unshielded twisted pair wire can be used for RS485 data.
- Two domes can be home run connected to each control output with both domes terminated. This is a daisy chain with two domes and on control output in the middle.
- The data lines can daisy-chain wired (see *Figure 1-2* and *Figure 1-3*) from the control output. Daisy-chain wiring consists of up to 32 domes per data run with the control output at one end of the run or in the middle of the run.
  - If the control output is at the end of the data run, the last dome on the end of the data run must be terminated and all intermediate domes unterminated.
  - If the control output is in the middle of the data run, the last dome on both ends must be terminated, and all intermediate domes unterminated.

Note Each RS485 port on the HDCC8TP must be treated individually as if each one is on a separate piece of equipment.

Figure 1-2 RS485 Daisy-Chain Wiring (up to 32 domes): Control at One End

Figure 1-3 RS485 Daisy-Chain Wiring (up to 32 domes): Control in the Middle



Setting the RS485 Control Data Termination on Switch SW1

1. Locate SW1 on the housing interface board. See *Figure 1-1*.
2. Carefully place the switch in the required termination position:
   - Not terminated (default): Switch **away from ON**
   - Terminated in 120 Ohms: Switch **ON**

About Video Selection Switch Options on Switch SW2

Control Over Coaxial Cable

For control over coaxial cable, the ACUIX must be set to VCL Video Telemetry (control over coax) protocol and must be controlled using an HMAX082 or HMAX162 control unit with HKJMMTP joystick controller.

The control equipment adds the data signal to the video coaxial cable. In this case, there are no connections made at Data+ and Data− on the terminal strip J1. See *Figure 1-1* for the location on the housing interface board.

Video Over Coaxial Cable

The video must be terminated in 75 Ohms at the last video device. If the video is not terminated or is double terminated, the resulting picture is poor and ghosting is displayed.

Video Over Unshielded Twisted Pair (UTP)

The video on the UTP wire cannot be daisy-chained.

If the UTP option is selected, the video is run on UTP wire and the BNC connector is not used. The video is connected at terminal strip J7, pins 1 and 2.See *Figure 1-1* for the location on the housing interface board. A UTP-compatible receiver is required at the monitor to view and/or record the images.

The video lift and gain settings can be adjusted through the on-screen setup menus to compensate for cable distances over UTP wiring. See *Table 1-5* and *Table 1-6* for lift and gain settings for cable lengths. Refer to the *ACUIX High Speed User Manual* for details about making the changes using the OSD.

Table 1-5 Recommended Lift Settings for Cable Lengths

Cable Length	Lift Setting
1200+ ft (365+ m)	100
900 ft (275 m)	80
600 ft (183 m)	40
300 ft (91 m)	25

Table 1-6 Recommended Gain Settings for Cable Lengths

Cable Length	Gain Setting
1200+ ft (365+ m)	55
900 ft (275 m)	42
600 ft (183 m)	35
300 ft (91 m)	25

Selecting Video Over Coaxial Cable or Unshielded Twisted Pair (UTP)

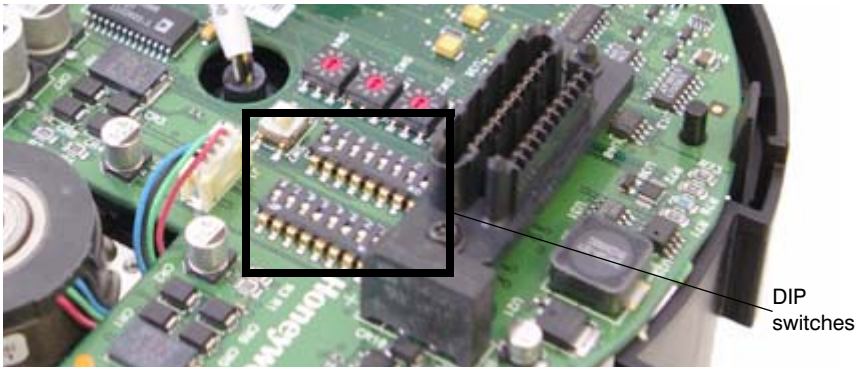
1. Locate SW2 on the housing interface board. See *Figure 1-1*.
2. Carefully place the switch in the required video selection position:
   - UTP video balun disabled, to be used with normal 75 Ohm coax video operation (default): Switch **away from ON**.
   - UTP video balun enabled, to be used with 120 Ohm UTP video operation: Switch **ON**.

Step 2: Set Switches on the Scan Assembly Circuit Board

Note The default settings are MAXPRO-mode protocol, 9600 baud, even parity.

- Set the DIP switches on the scan assembly printed circuit board as required for your system configuration. See *Figure 1-4* and refer to the tables below. For specific details about each switch, refer to the *ACUIX High Speed Dome User Guide*.

Figure 1-4 Scan Assembly Circuit Board - DIP Switch Location



Leave SW5-8 **ON**. Setting the DIP switch SW5-8 to **OFF** enables a user to change the address, protocol, baud rate and parity from the OSD menu (which is not recommended with most installations).

Table 1-7 DIP Switch SW5 ACUIX Protocol Settings

Protocol Name	Switch Position							
	1	2	3	4	5	6	7	8
IntelliBus™	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**
Diamond	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	**ON**
MAXPRO Mode	OFF	**ON**	OFF	OFF	OFF	OFF	OFF	**ON**
VCL - RS485	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	**ON**
VCL Video Telemetry (Control over Coax)	OFF	OFF	**ON**	OFF	OFF	OFF	OFF	**ON**
Pelco P	**ON**	OFF	**ON**	OFF	OFF	OFF	OFF	**ON**
Pelco D	OFF	**ON**	**ON**	OFF	OFF	OFF	OFF	**ON**

Table 1-8 DIP Switch SW6 ACUIX Baud Rate Settings

Baud Rate	Switch Position			
	1	2	3	4
600	OFF	OFF	OFF	OFF
1200	**ON**	OFF	OFF	OFF
2400	OFF	**ON**	OFF	OFF
4800	**ON**	**ON**	OFF	OFF
9600	OFF	OFF	**ON**	OFF

Table 1-8 DIP Switch SW6 ACUIX Baud Rate Settings

Baud Rate	Switch Position			
	1	2	3	4
19200	**ON**	OFF	**ON**	OFF
38400	OFF	**ON**	**ON**	OFF
57600	**ON**	**ON**	**ON**	OFF
115200	OFF	OFF	OFF	**ON**

Table 1-9 DIP Switch SW6 ACUIX Parity Settings

Parity	Switch Position	
	5	6
None	OFF	OFF
Even	**ON**	OFF
Odd	OFF	**ON**

Table 1-10 ACUIX Dome Addresses

Address	Value
SW1	Units digit
SW2	Tens digit
SW3	Hundreds digit
SW4	Thousands digit

Step 3: Mount the Rugged Housing Bracket

Note The mounting bracket can be at any angle from 0° to 90° with respect to the housing. The housing must be positioned horizontally and parallel to the floor.

1. Select the location for the housing.
   - Each ACUIX requires a 24 VAC ± 10% power source measured at the housing.
   - Ensure a 24 VAC @ 2.5A power source is available.
   - For maximum wiring distances to the dome, see *Table 1-3* on *page 13*.
2. Prepare the mounting surface by pre-drilling four holes to attach the mounting bracket to the ceiling or wall. See *Figure 1-5* for hole dimensions.
3. Secure a safety cable to a building support structure. Attach the safety cable (from the building support structure) to the mounting bracket by:
   a. Routing the safety around the mounting bracket, then
   b. Through a hole in the side of the mounting bracket and then
   c. Through the other side of the looping sleeve, and
   d. Crimp the looping sleeve to secure the safety cable.

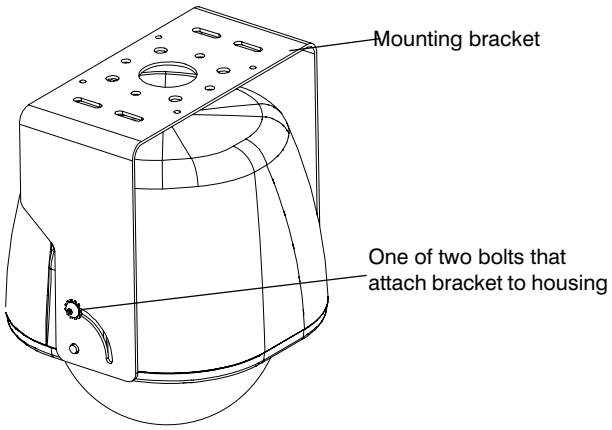
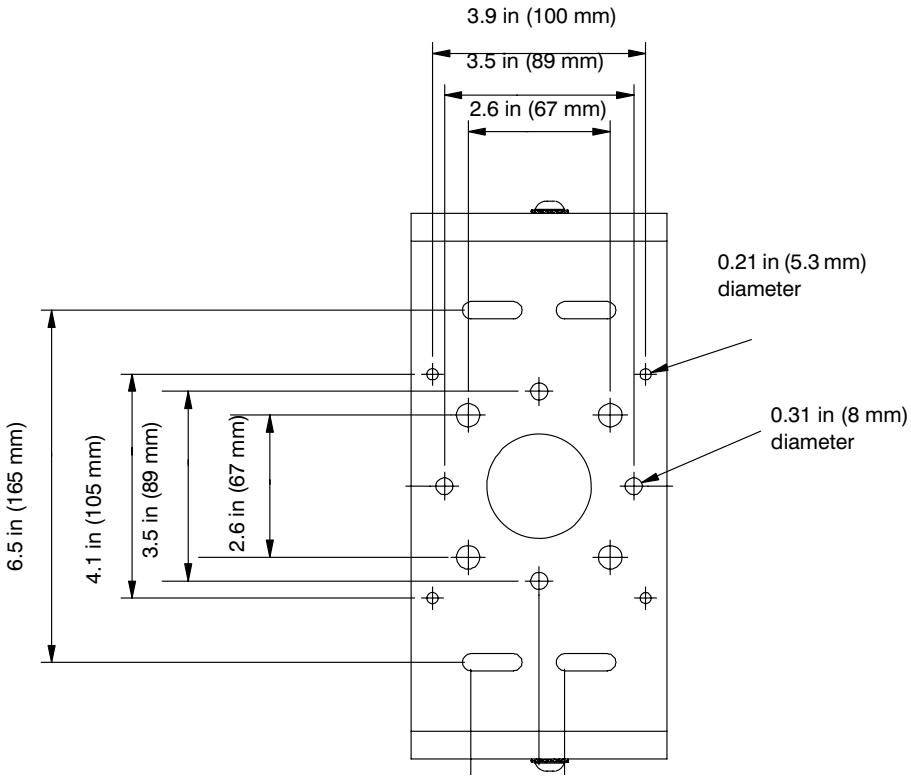


Figure 1-5 Rugged Housing Bracket Hole Dimensions



Step 4: Mount the Housing to the Ceiling or Wall

Note With outdoor installations or a wet indoor area, the conduit and conduit fitting must be water tight.

1. Install a 0.75"(19 mm) conduit fitting in the hole on the housing.
2. Place the supplied gasket between the hole in the housing and the conduit fitting to prevent leakage. Tighten the conduit nut.
3. Secure the housing to the mounting bracket, previously installed to a ceiling support structure or wall support structure using the appropriate hardware for the mounting surface.

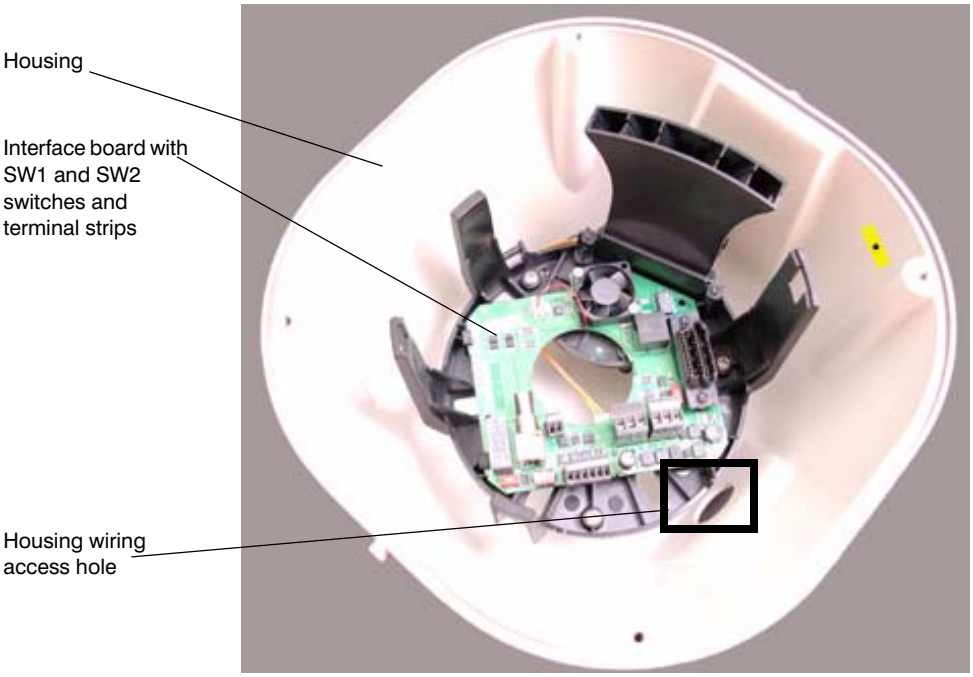
Note The mounting bracket can be at any angle from 0° to 90° with respect to the housing. The housing must be positioned horizontally and parallel to the floor.

4. To change the orientation of the bracket:
   a. Loosen and remove the two bolts that secure the bracket to the housing.
   b. Slide the bracket along the slot to remove it from the housing.

Step 5: Connect the Field and Terminal Block Wiring

The wiring installation must be performed by qualified technical personnel and must be in accordance with all national and local mechanical and electrical codes.

Figure 1-6 Rugged Housing Layout



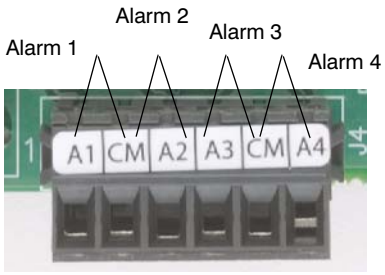
Note The field wiring is connected to the housing interface board (see *Figure 1-6*).

Note When connecting field wiring, connect to **either J3 or J7**, not to both at the same time.

1. Route the field wiring (data, power, video, alarm):
   a. Through the field wiring access hole in the housing, and
   b. Through the access hole in the interface board installed in the housing.
2. Remove the plug-in terminal blocks on terminal strips J1 and J6 (see *Figure 1-1*).
3. To set up the alarm input terminal block:
   a. Remove the plug-in terminal block on terminal strip J4. (see *Figure 1-1* and *Figure 1-7*).
   b. Connect a twisted-pair cable from each peripheral alarm contact to each input at the alarm number terminal and the alarm common terminal on terminal strip J4. The alarm is a dry contact between the alarm terminal and the common terminal. The alarms can be configured as normally open or normally closed.
   c. Note that the common terminals are doubled up, as shown in *Figure 1-7*. Refer to the *ACUIX User Manual* to configure the alarms.
4. Loosen the screws on the terminal strip.

Note The alarm input is a dry contact between the alarm input and common and that they can be configured as NO of NC.

Figure 1-7 J4 Terminal Block Alarm Connection



5. Install the 24 VAC power wires, data wires, video wires (if UTP is selected) and alarm wires on the correct positions on terminal strips J1, J4, J6, and J7. See *Table 1-11* and *Figure 1-1*.

Note Both terminal strips J1 and J6 accept 26−12 AWG wire. If larger or smaller field-run wire is required, a 26−12 AWG wire must be spliced onto the field wire for insertion into the terminal strip.

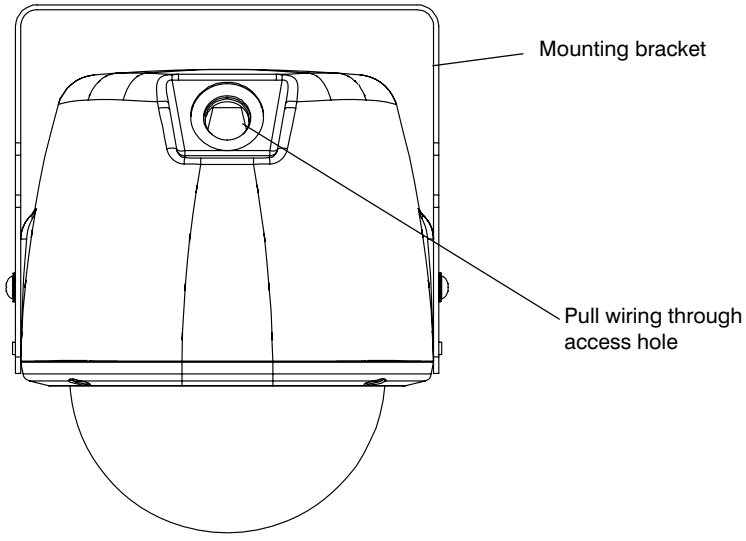
Note You can connect the data cable shield to Pin 3 (SH) on terminal strip J1. Use this connection for looping the shield through to the next dome in the daisy chain. It is not connected to the analog interface board.

6. Tighten the screw on the terminal strip to secure the wire.
7. Plug the terminal strips into the respective connectors on the interface board. See *Figure 1-1*.
8. If you are using a coaxial cable for video, connect the field-run coaxial cable to J3 on the interface board. See *Figure 1-1*.
9. If applicable, secure the wires from the terminal strip and BNC connector together with a wire tire to ensure the cabling does not interfere with the rotation of the pan and tilt assembly. See *Figure 1-1*.
10. Feed extra wire and cable up through the hole in the housing and route it so that it doesn't interfere with the pan and tilt unit when it is inserted. See *Figure 1-1* and *Figure 1-8*.

Table 1-11 Terminal Strip Pins and Functions (J1, J4, J6 and J7)

Terminal Strip J1	Function
Pin 1	24 VAC (AC)
Pin 2	Earth ground
Pin 3	24 VAC (AC)
Terminal Strip J4	**Function**
Pin 1	Alarm 1 (A1)
Pin 2	Alarm common (CM)
Pin 3	Alarm 2 (A2)
Pin 4	Alarm 3 (A3)
Pin 5	Alarm common (CM)
Pin 6	Alarm 4 (A4)
Terminal Strip J6	**Function**
Pin 1	Data + (D+)
Pin 2	Data – (D–)
Pin 3	Shield (SH)
Terminal Strip J7	**Function**
Pin 1	Video + (V+) (UTP wiring)
Pin 2	Video – (V–) (UTP wiring)

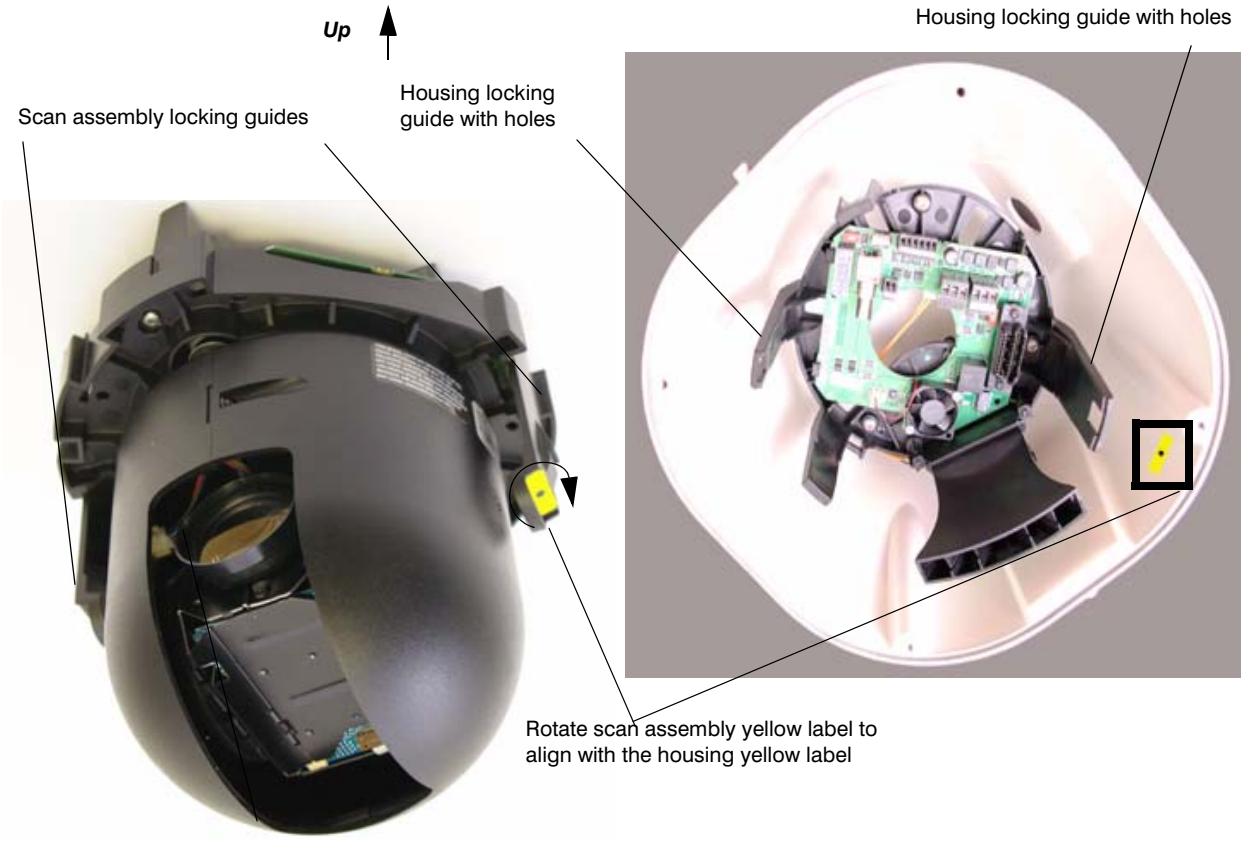
Figure 1-8 Rugged Housing Cable Access Hole



Step 6: Install the Scan Assembly into the Housing

1. Carefully remove the plastic lens cap from the scan assembly. Do not touch the lens.
2. Rotate and line up the scan assembly yellow label to the mounted housing yellow label. See *Figure 1-9*.
3. Gently push the scan assembly into the housing until the two guides on the scan assembly lock/snap into the holes on the housing guides.
4. Gently pull down on the assembly to ensure it has properly latched into place.

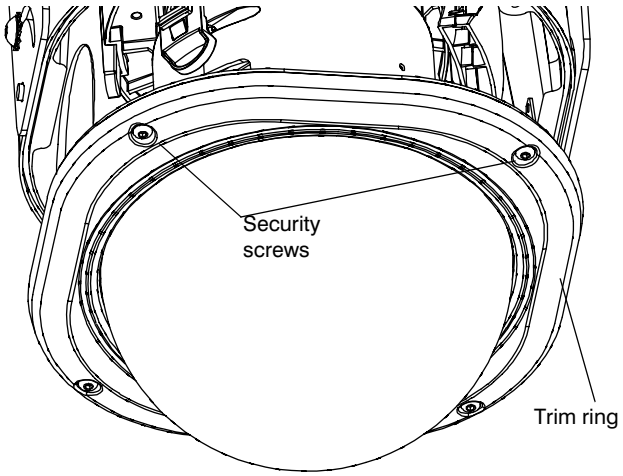
Figure 1-9 Insert the Scan Assembly into the Housing


Up
Housing locking guide with holes
Scan assembly locking guides
Housing locking guide with holes
Rotate scan assembly yellow label to align with the housing yellow label

Step 7: Install the Lower Dome onto the Housing

1. Align the four screw holes on the lower dome with the four holes on the housing.
2. Press the lower dome into the housing and turn the security screws using the special hex key to secure to the housing.

Figure 1-10 Rugged Housing - Lower Dome



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